

chemistry) and RU 2180160 (method and device for producing fractal-like structure). Numerous definitions of "fractal" are available. Thus, e.g. *"The Free Online Dictionary of Computing"* (<http://foldoc.doc.ic.ac.uk/>) defines "fractal" as a rough of fragmented geometric shape that can be subdivided in parts, each of which is (at least approximately) a smaller copy of the whole.

Consequently, "fractal-like" in the context of the present invention denotes a surface structure which simulates a fractal structure as this is understood in the art. Thus, it is submitted that a person of the art will recognize the structure produced by the present process as "fractal-like" and that the pending claims are adequately definitive. Nevertheless, Applicants would be agreeable to replace "fractal-like" by — fractal-like—in claim 1 if the Examiner believed that this would render the claims more definite.

Claim Rejections -- 35 U.S.C. §103

In paragraph 5 of the Official Action, claims 1-3 and 6-9 were rejected as being unpatentable over Drake, alone or in combination with Wasa.

In discussing Drake, it was stated at the top of page 3 of the Official Action that the atmosphere (in which his method was conducted) "is inert with a trace amount of oxygen present and a partial oxygen pressure up to and including 10^{-4} torr."

However, Drake in fact claims a deposition method conducted in oxygen at a partial pressure not exceeding 10^{-4} torr (see claim 1) with optionally a small quantity of inert gas (see claim 9), which is not at all the same as stated in the Official Action. For the subject matter of claim 9 to be consistent with the claimed method of Drake being "conducted in oxygen", it would be evident to the skilled person that the "small quantity" of inert gas must be less, possibly much less than that of the oxygen.

Thus, the method of present claim 1 for producing a fractal-like structure, which utilizes an inert atmosphere between 10^{-3} torr and 10^{-2} torr into which oxygen has been introduced at a pressure of from one to two orders of magnitude less than that of the inert gas, does not read unto the disclosure in Drake.

In Applicants' submission, it is illogical to attempt to convert the high oxygen low inert gas disclosure of Drake into the low oxygen high inert gas requirement of the present invention, in order to reach a finding that the present invention is obvious, by combination with Wasa.

The present inventors have discovered that the desired fractal-like surface can be formed by carrying out the deposition with a definite range of inert gas pressures and (lower) oxygen pressures. Applicants strongly disagree with the implicit argument in the Official Action that Applicants' special conditions for forming this specific structure are obvious because one partial pressure can be pulled out of Drake and combined with another partial pressure pulled out of Wasa, especially when neither Drake nor Wasa disclose fractal-like structures. A person to the art seeking to make an article with a fractal-like surfaced would have no reason to think that either Wasa or Drake (or a combination of both) could give rise to the desired structure.

Moreover, it is Applicants' position that there are no legitimate grounds for assertion in paragraph 7 of the Official Action that "the claimed process steps (in the cited prior art) ... would produce a fractal-like structure", which statement improperly regards Applicants' invention as part of the prior art.

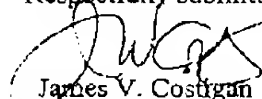
In Applicants' submission, their novel deposition conditions, which are totally different from those recited in Drake, are sufficient reason for understanding why in the present case a fractal like surface structure is obtained, whereas in Drake the product has a columnar surface structure.

Applicants believe that the presently claimed invention is both novel and inventive, that the final rejection should be withdrawn, and that the present claims should be allowed.

In view of the foregoing amendment and arguments the claims are believed to be allowable and the application is considered to be in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

However, in case of any outstanding matters which might be settled by telephone, the Examiner is requested to kindly contact the undersigned.

Respectfully submitted,


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